ABSTRACT OF THE DISCLOSURE

A high pressure fuel pump for an internal combustion engine having a cylinder, a plunger slidably fitted in the cylinder and a seal mechanism for blocking fuel leakage from an end of a sliding portion between the cylinder and the plunger and also for preventing an lubricant for a driving mechanism of the plunger from entering into the cylinder from the end of the sliding portion of the cylinder and the plunger. holder surrounding the end of the sliding portion of the cylinder and the plunger is provided. The seal mechanism comprises two mutually independent seal devices mounted with a specific spacing in a longitudinal direction from the end of the sliding portion of the cylinder and the plunger along a circumference of the plunger. The two seal devices are held on the circumference of the plunger by the holder surrounding the end of the sliding portion of the cylinder and the plunger while keeping the specific spacing.